

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2005/050052

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01R33/565

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, MEDLINE, EMBASE, BIOSIS, COMPENDEX, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ROOPCHANSINGH V ET AL: "Single-shot magnetic field mapping embedded in echo-planar time-course imaging" MAGNETIC RESONANCE IN MEDICINE WILEY USA, vol. 50, no. 4, October 2003 (2003-10), pages 839-843, XP002323257 ISSN: 0740-3194	1-6, 14, 15, 19, 23-26
Y	page 839, right-hand column - page 840, right-hand column page 843, left-hand column ----- -/--	27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the International search

5 April 2005

Date of mailing of the International search report

18/04/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Skalla, J

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PCT/IB2005/050052

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	SHOICHI KANAYAMA ET AL: "IN VIVO RAPID MAGNETIC FIELD MEASUREMENT AND SHIMMING USING SINGLE SCAN DIFFERENTIAL PHASE MAPPING" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 36, no. 4, 1 October 1996 (1996-10-01), pages 637-642, XP000629277 ISSN: 0740-3194	27
X	the whole document	1,19,26
X	US 4 623 843 A (MACOVSKI ET AL) 18 November 1986 (1986-11-18)	1,18-20, 24,26
Y	column 3, line 22 - line 54 column 7, line 12 - line 22	16,17,21
Y	US 5 731 704 A (SCHNUR ET AL) 24 March 1998 (1998-03-24) column 4, line 66 - column 5, line 20	16,17,21
X	WARD H A ET AL: "REAL-TIME AUTOSHIMMING FOR ECHO PLANAR TIMECOURSE IMAGING" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 48, no. 5, November 2002 (2002-11), pages 771-780, XP001130531 ISSN: 0740-3194 page 772; figure 1 page 777, left-hand column	1-13,19, 26
X	ROOPCHANSINGH V. ET AL: "Magnetic Field Mapping in Real Time with a Single RF Pulse" PROCEEDINGS OF THE INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE, TENTH MEETING PROCEEDINGS, 18 May 2002 (2002-05-18), XP002323258 HONOLULU, HI, USA the whole document	1-6,14, 15,19, 23-27
A	WEISKOPF N. ET AL: "Correction of Geometric Distortion in fMRI: a Single-Shot Technique Using Multi-Echo Echo-Planar Imaging (EPI)" PROCEEDINGS OF THE INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE, TENTH MEETING PROCEEDINGS, 18 May 2002 (2002-05-18), page 1742, XP002323259 HONOLULU, HI, USA the whole document	1-27

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SHEN J ET AL: "IMPROVEMENTS ON AN IN VIVO AUTOMATIC SHIMMING METHOD (FASTERMAP)" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 38, no. 5, November 1997 (1997-11), pages 834-839, XP000741762 ISSN: 0740-3194 cited in the application the whole document</p> <p>-----</p>	1-27
A	<p>GRUETTER R ET AL: "Field mapping without reference scan using asymmetric echo-planar techniques" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 43, 2000, pages 319-323, XP002294864 ISSN: 0740-3194 the whole document</p> <p>-----</p>	1-27
A	<p>ERICSSON A ET AL: "MEASUREMENTS OF MAGNETIC FIELD VARIATIONS IN THE HUMAN BRAIN USING A 3D-FT MULTIPLE GRADIENT ECHO TECHNIQUE" MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 33, no. 2, 1 February 1995 (1995-02-01), pages 171-177, XP000482943 ISSN: 0740-3194 figure 1</p> <p>-----</p>	1-27

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4623843	A	18-11-1986	NONE	
US 5731704	A	24-03-1998	DE 19536390 A1 JP 9117435 A	03-04-1997 06-05-1997